

## REMARKS

### Status of the claims

Claims 1-69 are pending and claims 1-36 and 51-69 are withdrawn. Claims 37-50 are rejected herein. Claims 1-36, 41 and 51-69 are canceled herein. Claims 37-38, 42 and 44 are amended. New claims 70-71 are added. No new matter was added in any claim amendment.

### Amendments to the claims

Claim 37 is amended to incorporate the limitations of dependent claim 41 to recite "an antenna" and to clarify that the antenna is connected to the radiofrequency power source. Claim 37 also is amended to recite a reactant as comprising the device (pg. 15, ll. 24-29; pg. 34, ll. 18-23).

Claim 38 is amended to limit at least one substrate to a tissue, a cell, a protein, a lipid, a nucleic acid, or a carbohydrate which are the biologically active materials originally recited in the claim (pg. 16, ll. 1-3).

Claims 42 and 44 are amended to depend on amended independent claim 37 as claim 41 is canceled. Claim 42 also is amended to recite that the antenna comprises at least one electrical conductor. Claim 44 is amended to recite that the antenna has a substantially planar geometry, a non-planar geometry (pg. 45, ll. 23 to pg. 46, ll. 9; Figs. 13A-13C, 14A-14B) or a solenoid antenna.

New claims 70-71 limit the reactant to a protein, a lipid, a nucleic acid, or a carbohydrate or as comprising a pharmaceutical compound,

respectively (pg. 34, ll. 18-23). Claims 1-36, 41 and 51-69 are canceled. No new matter is added in any claim amendment.

The 35 U.S.C. §102(b) rejection

Claims 37-50 are rejected under 35 U.S.C. §102(b) as being anticipated by **Gordon** (U.S. Patent No. 4,889,120). Applicants respectfully traverse this rejection.

The Examiner states that **Gordon** discloses a device for treatment of substrates, comprising a radiofrequency power supply, and energy absorbing species and a means for inductively applying the RF energy to the substrate (col. 5, ll. 41-65).

**Gordon** teaches minute energy absorbing particles that are metal particles, an inorganic metal compound or an organic metal compound or complex and may have ferromagnetic, paramagnetic or diamagnetic properties (col. 2, ll. 35 to col. 5, ll. 12). The energy absorbing species may be in a solution, which is directly injected or is allowed to passively permeate into the edges of a biological structure (col. 5, ll. 13-18). The biological structure may be a blood vessels, lymph sites, the gastrointestinal tract, the respiratory system, the biliary system or the genitourinary system (col. 10, ll. 45-50). An electronic oscillator generates frequencies that heat the particles by subjecting them to an intense frequency field within a helical coil (col. 5, ll. 48-65) which joins the edges of the biological structure.

Applicants invention is described *supra* for amended independent claim 37. To anticipate a claim, the prior art reference must teach each claim

element as they are arranged in the claim. **Gordon** does not teach a device comprising a reactant, particularly a reactant that is distinct from the energy absorbing species and not chemically bonded, linked or complexed thereto. Rather **Gordon** discloses only the minute energy absorbing particles, as described *supra*, which may be chemically bonded or complexed to an inorganic or organic moiety to form a metal compound. Only the minute metal particles *per se* in **Gordon** are effective to transduce the frequency field generated by the helical coil to heat to join the edges of the biological structures.

Thus, absent this teaching **Gordon** cannot anticipate the instant invention, as recited in amended independent claim 37. Therefore **Gordon** is not a proper reference under 35 U.S.C. §102(b). Furthermore, claims 38-40 and 42-50 depend directly or indirectly from amended independent claim 37. These claims further limit the substrate (claims 38-39), the radiofrequency power supply and antenna (claims 40, 42-44) and the energy absorbing species (claims 45-50). New claims 70-71 limit the reactant now recited in amended independent claim 37. The inclusion of the limitations of any or all of these claims into claim 1 still would not be anticipated by **Gordon** since **Gordon** does not teach a reactant.


Therefore, in view of the claim amendments and arguments presented herein, Applicants respectfully request that the rejection of claims 37-40 and 42-50 under 35 U.S.C. §102(b) be withdrawn.

This is intended to be a complete response to the Office Action mailed June 29, 2006. Should any issues remain outstanding, the Examiner is respectfully requested to telephone the undersigned attorney of record for immediate resolution. Applicants enclose a Petition for a Three Month Extension

of Time. Please charge the \$510 petition fee under 37 C.F.R. §1.17(a) to the credit card identified on the enclosed Form PTO-2038. **Only in the absence of** Form PTO-2038, please debit any applicable fees from Deposit Account No. 07-1185 upon which the undersigned attorney is allowed to draw.

Respectfully submitted,

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